

Notice of Allowability

Application No.

10/772,829

Examiner

David Kovacek

Applicant(s)

COOPER ET AL.

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's amendment of 10/08/2009.
2. ☒ The allowed claim(s) is/are 1 and 3-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 01-29-2010.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

DMK, 01/29/2010

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter H. Priest on 01/25/2010.

The application has been amended as follows:

Regarding **claim 1**, the last line of the third paragraph should instead read, -- abbreviated prompts to users with greater experience levels with the active function;--

Additionally a fourth paragraph should be added to **claim 1** that reads --wherein a usage history for the user is organized on a module by module basis and the function usage tally is used as an index for the prompt selection module.--

Regarding **claim 11**, the last line of the fifth paragraph should instead read, -- greater detail about the nature of input needed for users with lower experience levels with the active function;--

Additionally a fourth paragraph should be added to **claim 11** that reads, -- wherein a usage history for the user is organized on a module by module basis and the function usage tally is used as an index for the prompt selection prompt.--

Regarding **claim 21**, this claim should instead read, --The system of claim 1 wherein the function usage tally is used as index by the prompt selection module for searching for a prompt in a prompt database organized on a module by module basis.—

2. The following is an examiner's statement of reasons for allowance:

The previously cited prior art references of interest include the disclosures of Cohen (US patent 6,560,576) Comerford (US Patent 6,748,361), and Surace (US Patent 6,144,938).

Regarding **claim 1**, Cohen discloses a voice [speech] recognition system comprising:

- a plurality of modules for receiving voice inputs from a user and performing services in response (Fig. 1, item 2; Fig. 2; Col. 4, lines 13-15; Col. 4, lines 31-32; Col. 4, lines 53-57),
- each module including at least one function [at least one voice-enabled application] and at least one module including multiple functions [applications may be designed to manage investments, wherein such

management would comprise multiple functional capabilities] (Col. 4, lines 18-19; Col. 4, lines 25-29);

- a user information database [usage history] storing user records including a function usage fully indicating the number of times the user has successfully performed the function [number of times the user has used the browser to request any type of content] (Col. 8, lines 11-15, 22-23, 52-53, 60)
- a prompt selection module [voice browser] for selecting a prompt for presentation to a user (Col. 3, lines 26-31; Fig. 4; Fig. 5),
- the module being operative to identify both an overall experience level of a user with the system [number of session a given user has had with the voice browser] (Col. 8, lines 11-15, 22-23, 60) and an experience level with the function [number of times the user has used the browser to request any type of content during the session] (Col. 8, lines 11-15, 52-53) and select a prompt appropriate to the user's experience level (Col. 5, lines 48-55).

Comerford additionally teaches:

- a user information database [dialogue management user data] storing user records including a function usage tally indicating the number of times the user has successfully performed each

function [data for total dictation activity] (Fig. 16, elements 160004, 16006, 16022; Col. 22, lines 54-57); and

- a prompt selection module for obtaining module, function and function usage tally information for a current function being used by a user selecting a prompt for presentation to the user [choosing novice, intermediate, or expert prompt] (Fig. 16, elements 16008-16020; Col. 22, lines 37-53),

- a prompt being a message from the system to the user calling for a user input appropriate to the function being performed [guidance which matches the amount of experience they have with a given feature and time since they used that feature] (Col. 21, line 66 – Col. 22, line 04; Col. 22, lines 37-47),

- the prompt selection module identifying both an overall experience level of the user with the system [time since a user last used a feature] and an experience level with the current function being used [the amount of experience a user has with a given feature] and selecting a prompt appropriate to the user's experience level with the current function [expert, intermediate, or novice prompt] (Fig. 16, elements 16006, 16008, 16022; Col. 21, lines 63-65; Col. 2, lines 26-31; Col. 22, lines 37-40),

- selection of prompts tending to favor the presentation of more abbreviated prompts to users with greater experience

levels with the current function [prompts are graded in terms of the detail the contain] (Fig. 16, element 16012; Col. 21, lines 53-65; Col. 21, line 66 – Col. 22, line 04).

It is further noted by the examiner that the additional limitations directed to voice dialing are well-known in the art, and can be found in such prior art references as US PGPUB 2006/0062381 to Herron (hereinafter Herron). Herron is particularly directed to a system and method for voice-dialing (Fig. 3; Page 4, paragraphs 0037-0039).

It is further still noted by the examiner that the additional limitations directed to voicemail functionality are well-known in the art, and can be found in such prior art references as US PGPUB 2005/009095 to Fellenstein (hereinafter Fellenstein). Fellenstein is particularly directed to extending functions to a voicemail system (Abs; Page 1, paragraphs 000—0009).

However, none of the prior art found, alone or in combination, properly addresses the additional features of **claim 1** directed to wherein a usage history for the user is organized on a module by module basis and the function usage tally is used as an index for the prompt selection module.

Each of Cohen and Comerford make use of usage histories in their respective teachings (Cohen: Col. 8, lines 22-24, 52-53, 60; Comerford: Col. 21, line 52 – Col. 22, line 04). However, Cohen does not organize this information based upon any sorting of module or functional usage of a user. Comerford does keep track of independent function usage of the system for each user [novel tapering feature to determine best prompt for a user; prompt matches a users experience with a given feature and the time

since they last used that feature] (Col. 21, line 52 – Col. 22, line 04). In this respect, Comerford is the most pertinent of the prior art found, however there is no teaching in Comerford to specifically organize the user history such that a function usage tally can be directed used as an index in prompt selection.

Similarly, the disclosure of Ehlen (US PGPUB 2004/0006480; cited previously) additionally provides function-by-function usage history for a given user with the system therein [examining how much information the user has already established so as not to repeat an instruction] (Page 5, paragraph 0048), but is also deficient in that there is no teachings directed to using an experience level to directly determine the appropriate prompt.

An additionally relevant reference is the disclosure of US Patent 6,567,805, hereinafter referred to as Johnson, wherein a dialog manager makes use of a session history to track the various inputs provided by a user in planning the eventual layout of an automated response to a user (Col. 3, lines 48-67; Col. 4, lines 15-25). However, while the system makes use of the context of the dialog with the user (Abstract; Col. 10, lines 20-41), the ultimate prompt selection is based upon a categorization of the dialog, rather than a direct determination based upon a value describing the experience user of a particular function (Col. 11, lines 41-47). It is additionally noted that the teachings of Johnson are directed to an intentionally incomplete history of all user interaction (Col. 11, lines 28-40).

The most pertinent prior art reference found is the previously cited disclosure of Surace (US Patent 6,144,938), which does explicitly disclose a prompt selection based upon a known prompt history for a given user (Col. 13, lines 05-20; Col. 14, lines 52-57). However, though the prompt selection does require direct reference to the prompt history, there is no specific teaching within Surace directed to a usage tally or experience level being a direct indexing in the process of choosing an appropriate prompt, as required by the limitations of **claim 1**. In fact, Surace additionally teaches an intentional randomization of selection amongst equally-favored prompts for the purposes of providing a more naturalistic interaction experience (Col. 15, lines 14-22).

Therefore, for at least the above reason that none of the prior art, alone or in combination, properly addresses the limitation of **claim 1** directed to the function usage tally is used as an index for the prompt selection module in combination with the other claimed features of the same, **claim 1** comprises allowable subject matter and is allowed.

Regarding **claims 3-10 and 17-21**, each of these claims depends upon allowed **claim 1** and merely adds additional limitations to the allowed subject matter. Therefore, each of these claims is allowed for the same reasons applied above to **claim 1**.

Regarding **claim 11**, this claim is directed to subject matter that is very similar to the combination of limitations allowed in **claim 1**, and therefore is allowed for the same

reasons. It is noted by the examiner that the limitations of **claim 11** are effectively directed to a method which would be performed by the system of **claim 1**.

Regarding **claims 12-16**, each of these claims depends upon allowed **claim 11** and merely adds additional limitations to the allowed subject matter. Therefore, each of these claims is allowed for the same reasons applied above to **claim 11**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- French (US Patent 5,428,679) teaches an automated service assurance method and system.
- Tatchell (US Patent 5,905,774) teaches a method and system of accessing and operating a voice message system.

- Fukui (US Patent 5,918,222) teaches an information disclosing apparatus and multi-modal information input/output system.
- Pickett (US PGPUB 2002/0001302) teaches a system and method for multiple mode voice and data communications using intelligently bridged TDM and packet buses.
- Biebesheimer (US PGPUB 2002/0107842) teaches a customer self service system for resource search and selection.
- Oblinger (US PGPUB 2002/0105532) teaches a customer self service subsystem for response set ordering and annotation.
- Zirngibl (US Patent 6,587,547) teaches a system and method for the creation and automatic deployment of personalized dynamic and interactive voice services.
- Bhargava (US PGPUB 2003/0123618) teaches a system and methodology for voice activated access to multiple data sources and voice repositories in a single session.
- Deo (US Patent 6,594,355) teaches a method and apparatus for providing real time execution of specific communications services in an intelligent network.
- McClung (US PGPUB 2004/0028027) teaches extended telephony functionality at end points of a telephony network.
- Hudgeons (US PGPUB 2004/0210923) teaches a method and system for facilitating interactive multimedia experiences.

- Maes (US Patent 6,934,756) teaches a conversational networking via transport, coding and control conversational protocols.
- Busayapongchai (US Patent 6,944,594) teaches a multi-context conversational environmental system and method.
- Sinha (US Patent 6,970,474) teaches a personalized universal phone service.
- Poppink (US Patent 7,305,381) teaches an asynchronous unconscious retrieval in a network of information appliances.
- Mahowald (US Patent 7,324,942) teaches a system and method for interactive voice services using markup language with n-best filter element.
- Putman (US PGPUB 2008/0086564) teaches a communication application server for converged communication services.
- Chan (US Patent 7,515,695) teaches a client customizable interactive voice response system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Kovacek whose telephone number is (571)270-3135. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626

DMK, 01/29/2010